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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,476	05/17/2001	Hiromu Kikawa	H6810.0018/P018	2984

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EXAMINER

DICKENS, CHARLENE

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)	
	09/858,476	KIKAWA ET AL.	
	Examiner	Art Unit	
	Ex. Dickens	2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 13-22 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 23-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

1. Claims 13-22 are still withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in Paper No. 6.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 9-11, 23, 24, and 31-33 rejected under 35 U.S.C. 102(b) as being anticipated by Nishimura et al. (US Patent 4,709,581). Regarding claims 1 and 23 Nishimura et al. discloses an air flow measuring device comprising: a housing 1; a sub-passage 3 with an inlet 2 and an outlet 5,, said sub-passage having a predefined curvature with a maximum downstream point and an outer wall (Fig. 2); and a flow measuring element 6 located in said sub-passage at a position at least further downstream from said point, wherein said sub-passage has a successive curvature between said point and said flow measuring element (Fig 2);
Claims 2 and 24: Nishimura et al. discloses having a opening face in a plane parallel to said air flow into said inlet (Fig. 2);

Claims 9 and 31: Nishimura et al. discloses wherein said device is located in an air intake passage of an internal combustion engine (abstract);

Claims 10 and 32: Nishimura et al. discloses wherein said flow measuring element is coupled to an electronic circuit 12 for processing data received from said element;

Claims 11 and 33: Nishimura et al. discloses wherein an outer wall and an inclination of the outer wall at least before said point (Fig. 2).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-8, 12, 25-30, and 34 are rejected under 35 U.S.C.


103(a) as being unpatentable over Nishimura et al. in view of Hecht et al. (US Patent 6,332,356). Claims differ from Nishimura et al. with the recitations of an air vent having 1) an opening surface area of less than about fifty percent of a surface area of said outlet; 2) a height of about 1 mm; and 3) having a ratio of an opening surface area ratio of said air vent to a sectional surface area of said sub-passage less than about 1:10; and a sub-passage having an outer inclined wall having a predefined groove.

In regards to claims 4, 7, 8, 12, 26, 29, 30 and 34, Hecht et al. discloses a conduit 22, which act as an air vent, located remote from said flow measuring element 21 and a sub-passage having an outer inclined wall having a predefined groove 52 for the purpose of ensuring dirt particles will not reach the measuring conduit (col. 7, lines 27, 28, & 39-50). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have an air vent, located remote from said flow measuring element and a sub-passage having an outer inclined wall having a predefined groove in the Nishimura et al. as taught by Hecht et al. for the purpose of ensuring dirt particles will not reach the measuring conduit (col. 7, lines 27, 28, & 39-50).

In regards to claims 3, 5, 6, 25, 27 and 28 Hecht et al. does not specifically disclose an air vent having 1) an opening surface area of less than about fifty percent of a surface area of said outlet; 2) a height of about 1 mm; and 3) having a ratio of an opening surface area ratio of said air vent to a sectional surface area of said sub-passage less than about 1:10. These limitations serve the purpose of providing a sub-passage capable of separating out contaminants. Hecht et al. does not provide any specific dimensions. However, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ratios or dimensions by routine experiment. In re Swain et al., 33 CCPA (Patents) 1250, 156

F.2d 239, 70 USPQ 412; Minnesota Mining and Mfg. Co. v. Coe, 69 App. D.C. 217, 99 F.2d 986, 38 USPQ 213; Allen et al. v. Coe, 77 App. D.C. 324, 135 F.2d 11, 57 USPQ 136. In the instant case Hecht et al. discloses the claimed apparatus and would thus experience the separating out of contaminants within a flow stream. Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have performed routine experimentation to arrive with an air vent having 1) an opening surface area of less than about fifty percent of a surface area of said outlet; 2) a height of about 1 mm; and 3) having a ratio of an opening surface area ratio of said air vent to a sectional surface area of said sub-passage less than about 1:10 in the modified Nishimura et al. as suggested by Hecht et al. for the purpose of providing a sub-passage capable of separating out contaminants.

6. Applicant's arguments with respect to all of the claims have been considered but are moot in view of the new ground(s) of rejection. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of




this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Dickens or the supervisor, Edward Lefkowitz, whose telephone numbers are (703) 305-7047 or 305-4816, respectively.

CD

cd/dickens
June 15, 2003


EDWARD LEFKOWITZ
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